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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,707	11/15/2001	Alan J. Lipton	37112-175340	7303
26694	7590	06/16/2005	EXAMINER	
VENABLE LLP			LE, VU	
P.O. BOX 34385			ART UNIT	
WASHINGTON, DC 20045-9998			PAPER NUMBER	
			2613	
DATE MAILED: 06/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/987,707

Applicant(s)

LIPTON ET AL.

Examiner

Vu Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-4, 19-23, 25-28 are rejected under 35 U.S.C. 102(e) as being by Vaithilingam et al, US 6,411,724 (hereinafter, patent '724) for the same reasons as set forth in the last Office Action.**

Re claim 1, patent '724 discloses the same computer-readable medium comprising software for a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives. (Figs. 2 & 4, col. 1, lines 24-27, col. 2, line 65 – col. 3, line 3, col. 3, line 44 – col. 5, line 21, these segments discuss software algorithm for multimedia information retrieval or query for various applications, including surveillance, based on video primitives i.e. meta-descriptors.

Note: software implies a computer-readable medium).

Re claim 2, a computer-readable medium as in claim 1, wherein the code segments for operating the video surveillance system comprises: code segments for extracting video primitives (col. 5, lines 1-21); and code segments for extracting event

occurrences from the video primitives (col. 11, line 14 – col. 12, line 14, these segments discuss “event” occurrences from description schemes).

Re claim 3, a computer-readable medium as in claim 2, wherein the event occurrences are extracted using event discriminators (col. 11, line 14 – col. 12, line 14, these segments discuss “event” occurrences from description schemes, which are ultimately extracted for analysis).

Re claim 4, a computer-readable medium as in claim 2, further comprising code segments for archiving the extracted video primitives (col. 3, line 44 – col. 4, line 29, these segments discuss extracted descriptors which are then “archived” in multimedia repository).

Re claim 19, a computer-readable medium as in claim 1, wherein the video primitives are from at least one of a video sensor and another sensor. (See col. 1, lines 65-66).

Re claim 20, a computer-readable medium as in claim 1, wherein the video primitives are retrieved from an archive of video primitives. (See col. 2, lines 50-64).

Re claim 21, a computer system comprising the computer-readable medium of claim 1. (See fig. 1, col. 13, line 65 – col. 14, line 7).

Re claims 22-23, 25-26, the limitations have been analyzed and rejected w/r to claims 1-4 and 19-20.

Claims 27-28 have been analyzed and rejected w/r to claim 1 above. In patent '724, one of the systems disclosed in a surveillance system (col. 1, line 64-65).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 5-18, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaithilingam et al, US 6,411,724 (hereinafter, patent '724) as applied to claims 1-2, 22 above and further in view of Collins et al, "A System for Video Surveillance and Monitoring" for the same reasons as set forth in the last Office Action. (The grounds are restated below for convenience)**

Re claim 5, patent '724 discloses a computer-readable medium comprising software for a video surveillance application, but fails to provide details for undertaking a response based on extracted event occurrences as claimed. Collins et al makes it well known a computer implemented video surveillance system comprising code segments for undertaking a response based on extracted event occurrences. (For example, see fig. 4, para. 2.2-2.3, 3.2, 3.6.1. In these segments, object movements qualify as event occurrences, and tracking said object movements qualify as a response).

Therefore, taking the combined teaching of patent '724 and Collins et al as a whole, it would have been obvious to modify video surveillance as suggested in patent '724 to include object tracking in response to object movements as taught by Collins et al for the benefit of targeted video surveillance.

Re claim 6, a computer-readable medium as in claim 5, wherein the response comprises initiating another sensor system. (See Collins et al, fig. 4, para. 3.6.2-3.6.3, these segments discuss switching or sensor hand-off during object tracking).

Re claim 7, patent '724 discloses a computer-readable medium comprising software for a video surveillance application, but fails to provide details for calibrating the video surveillance system as claimed. Collins et al makes it well known a computer implemented video surveillance system comprising code segments for calibrating the video surveillance system. (For example, see Collins et al, para. 4 & 4.2, these segments discuss about calibrating the video surveillance system).

Therefore, taking the combined teaching of patent '724 and Collins et al as a whole, it would have been obvious to modify video surveillance as suggested in patent '724 to include camera calibration as taught by Collins et al for the benefit of minimizing human intervention.

Re claim 8, a computer-readable medium as in claim 7, wherein the code segments for calibrating comprise code segments for self-calibrating the video surveillance system. (See Collins et al, para. 4.2, this segment discusses about self calibrating the video surveillance system).

Re claim 9, a computer-readable medium as in claim 8, wherein the code segments for self-calibrating comprise: code segments for detecting at least one object in a source video; and code segments for tracking the object. (See Collins et al, para. 3.1, 3.1.1, 3.1.2, 3.1.3, 3.2, 4 & 4.2, these segments discuss about self-calibrating the

video surveillance system involving detecting at least one object in a source video, and tracking said object).

Re claim 10, a computer-readable medium as in claim 9, wherein the code segments for detecting at least one object comprise: code segments for detecting at least one object via motion of the object; and code segments for detecting at least one object via change in a background model. (See Collins et al, para. 3.1, 3.1.1, 3.1.2, 3.1.3, 3.2, these segments discuss about detecting object in motion and detecting object via change in a background model).

Re claim 11, a computer-readable medium as in claim 7, wherein the code segments for self-calibrating comprise: code segments for identifying trackable areas, and code segments for identifying typical sizes of typical objects. (See Collins et al, para. 3.1, 3.1.1, 3.1.2, 3.1.3, 3.2, these segments also discuss about identifying trackable areas, and identifying typical sizes of typical objects).

Re claim 12, a computer-readable medium as in claim 7, wherein the code segments for calibrating comprise: code segments for manual calibration; code segments for semi-automatic calibration; and code segments for automatic calibration. See Collins et al, para. 4.2, this segment discusses provision enabling manual, semi-automatic, and automatic calibration).

Re claim 13, patent '724 discloses a computer-readable medium comprising software for a video surveillance application, but fails to provide details for tasking the video surveillance system with event discriminators as claimed. Collins et al makes it well known a computer implemented video surveillance system comprising code

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segments for tasking the video surveillance system with event discriminators. (For example, see Collins et al, para. 3.6.3, 5, 5.1, 5.2, these segments discuss tasking the video surveillance system with event discriminators. See also Table 3-6).

Therefore, taking the combined teaching of patent '724 and Collins et al as a whole, it would have been obvious to modify video surveillance as suggested in patent '724 to include tasking the video surveillance system with event discriminators as taught by Collins et al for the benefit of enhanced video surveillance in complex scenes.

Re claim 13, a computer-readable medium as in claim 1, further comprising code segments for tasking the video surveillance system with event discriminators. (See Collins et al, para. 3.6.3, 5, 5.1, 5.2, these segments discuss tasking the video surveillance system with event discriminators. See also Table 3-6).

Re claim 14, a computer-readable medium as in claim 13, wherein the code segments for tasking comprise code segments for identifying at least one object. (See Collins et al, para. 5, 5.1, 5.2, these segments discuss tasking that comprises identifying at least one object. See also Table 3-6 ).

Re claim 15, a computer-readable medium as in claim 13, wherein the code segments for tasking comprise code segments for identifying at least one spatial area. (See Collins et al, para. 5, 5.1, 5.2, these segments also discuss tasking that comprises identifying at least one spatial area. See also Table 3-6).

Re claim 16, a computer-readable medium as in claim 13, wherein the code segments for tasking comprise code segments for identifying at least one temporal



attribute. (See Collins et al, para. 5, 5.1, 5.2, these segments also discuss tasking that comprises identifying at least one temporal attribute. See also Table 3-6).

Re claim 17, a computer-readable medium as in claim 13, wherein the code segments for tasking identify at least one interaction. (See Collins et al, para. 5, 5.1, 5.2, these segments also discuss tasking that comprises identifying at least one interaction. See also Table 3-6).

Re claim 18, a computer-readable medium as in claim 13, wherein the code segments for tasking identify at least one alarm. (See Collins et al, para. 3.2, this segment discusses identifying and rejecting false alarms).

Re claim 24, a computer-readable medium as in claim 22, further comprising code segments for undertaking a response based on extracted event occurrences. (The limitations have been analyzed and rejected w/r to claim 5).

### ***Response to Arguments***

5. Applicant's arguments filed January 7, 2005 with respect to claims 1-26 have been fully considered but they are not persuasive.

With respect to claims 1-4, 19-23 and 25-26, applicant alleges that patent '724 fails to teach or suggest the recited "code segments for operating the video surveillance system" (Remarks, p. 7). Examiner respectfully disagrees.

Patent '724 applies to various multimedia systems inclusive of surveillance that utilizes a descriptor to represent a particular feature of multimedia information so that it can be created, exchanged, retrieved and/or reused (col. 1, line 53 – col. 2, line 9). When a descriptor is utilized in a multimedia surveillance system for surveillance as

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disclosed in patent '724, certainly a software program i.e. code segment for operating said multimedia surveillance system is inherent and necessitated. How else does a multimedia system function as a surveillance system using descriptor as disclosed in patent '724 without software program to operate it?

Applicant also alleges that patent '724 fails to teach or suggest operating a video surveillance system based on "video primitives" (Remarks, p. 8). Examiner respectfully disagrees.

In patent '724, multimedia descriptors are the video primitives as claimed. When a multimedia system "operates" as a surveillance system, and using descriptors to retrieve multimedia contents as disclosed/suggested in patent '724, it is functioning based on those descriptors i.e. video primitives.

Applicant asserts that the claimed video primitives are not descriptors about video products as defined by patent '724. Instead, the video primitives describe observable attributes view in a video feed. Further, the video primitives are not used to retrieve video product from a database (Remarks, p. 9). These distinctions have not been claimed and thus cannot be read into the claims.

Applicant alleges that patent '724 does not teach or suggest the recited video primitives, accessing archived video primitives, or extracting event occurrences from accessed archived video primitives. Examiner respectfully disagrees.

From the above response, it is viewed that patent '724 teaches/suggests video primitives as claimed. It is viewed that patent '724 sufficiently teaches/suggests retrieval of archived video primitives and extraction of event occurrences from accessed

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archived video primitives (see col. 3, line 44 – col. 4, line 29, col. 11, line 14 – col. 12, line 14).

With respect to claims 5-18 and 24, applicant alleges that the Collins reference does not cure the deficiency of patent '724 of the claimed video primitives. Applicant also alleges that patent '724 and the Collins reference are nonanalogous art. Examiner respectfully disagrees.

The Collins reference does teach/suggest the video primitives as claimed. Paragraph 3 of Collins (Video Understanding Technology) discloses detected objects are “classified” into semantic categories. This is consistent with examples of video primitives as defined in applicant’s specification (p. 13). Nevertheless, Collins is relied upon to obviate the claimed limitation of “code segments for undertaking a response based on extracted event occurrences” as claimed. As discussed above, patent '724 does teach/suggest video primitives as claimed.

With respect to the argument of nonanalogous art, the determination that a reference is from a nonanalogous art is twofold. First, whether it is within the field of the inventor’s endeavor. Second, whether it is reasonably pertinent to the particular problem with which the inventor was involved. In re Mlot-Fijalkowski, 213 USPQ 713 (CCPA 1982). The first test shows that patent '724 and the Collins reference are within the applicant’s endeavor because they both teach/suggest video surveillance system. The second test shows that the combined teaching of patent '724 and the Collins reference as a whole is pertinent to the applicant’s invention because they solve the

need to operate a video surveillance system to efficiently retrieve multimedia contents based on descriptors i.e. video primitives.

Applicant's arguments with respect to claims 27-28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

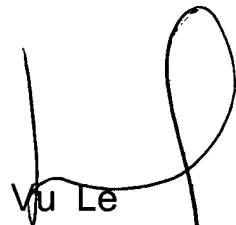
### **Contact**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is (571) 272-7332. The examiner can normally be reached on M-F 8:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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